SIYANBOLA

FACULTY OF SCIENCE
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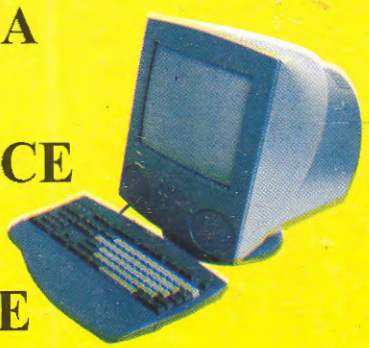
IBADAN, NIGERIA



INTERNATIONAL CONFERENCE ON SCIENCE AND SUSTAINABLE DEVELOPMENT IN NIGERIA

CONFERENCE PROGRAMME AND BOOK OF ABSTRACTS

THEME:

SCIENTIFIC RESEARCH AND SUSTAINABLE DEVELOPMENT IN NIGERIA

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Keywords: Thinning, Growth Models, System dynamic, Experiment, Forecast

SSD 106

SYNTHESIS, CHARACTERIZATION AND ANTIBACTERIAL EVALUATIONS OF NOVEL HYBRID POLYESTERAMIDE-URETHANES PREPARED FROM YELLOW OLEANDA SEED OIL

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ABSTRACT
Air drying polyesteramide-urethanes resins were synthesized from *Thevetia peruviana* seed oil commonly known as Yellow oleanda (a tropical ornamental shrub) having about 68.8% unsaturated and 30.9% saturated fatty acids. The physico- chemical characterization of the optimized unsaturated FAME such as hydroxyl value, iodine value, saponification value, refractive index, inherent viscosity were carried out using standard methods. Through condensation reaction the N,N'- bis(2-hydroxyethyl) *Thevetia peruviana* (HETA) prepared from the FAME reacted with isophthalic acid to form polyesteramide. The latter undergo urethanation with $H^{1,2}$MDI. The structural elucidation of the moisture cured polyesteramide-urethane coating was based on FTIR, ^{1}H-NMR and ^{13}C-NMR spectroscopic methods. The coatings films were evaluated for its antibacterial activity and thermal stability properties on TGA and DSC. The SEM of the coating films was also examined.

SSD 107

A CRITICAL ASSESSMENT OF THE NIGERIAN RURAL ELECTRIFICATION POLICY

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ABSTRACT
The problem of access to modern energy services is a major developmental issue confronting rural communities globally, particularly in Asia and sub – Saharan Africa. Modern energy services are benefits derived from modern energy sources such as electricity, natural gas, clean cooking fuels and mechanical power, that contribute to human well –being . This study takes a critical look at the problems and constraints of rural electrification in Nigeria. It also appraised the various policies and practices that have driven rural electrification in Nigeria, the level of implementation and the prospects of providing universal access to electricity services in rural areas of the country.

Keywords: Rural areas, Electricity, Policy, Nigeria

SSD 108

SEASONAL PREDICTION OF RAINFALL IN THE SOUTHWESTERN NIGERIA

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ABSTRACT
The availability of quantitative means of probing anticipated rainfall is essential for the purposes of planning and policy formulation everywhere in the world. This paper attempts to present some results of an ongoing experiment on seasonal prediction of